



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604**

DATE: MAY 24 2018

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
Expera Specialty Solutions (Expera), Kaukauna, Wisconsin 54130

FROM: Victoria Nelson, Environmental Engineer
AECAB (MI/WI)

THRU: Sarah Marshall, Section Chief
AECAB (MI/WI)

TO: File

BASIC INFORMATION

Facility Name: Expera Specialty Solutions (Expera)

Facility Location: 600 Thilmany Road, Kaukauna, Wisconsin 54130

Date of Inspection: March 19, 2018

EPA Inspectors:

1. Victoria Nelson, Environmental Engineer
2. Muhammed Shuaibi, Environmental Engineer

Other Attendees

1. Heath Hoffman, Business Unit Manager, Expera
2. Lee Hammen, Mill Manager, Expera
3. Barbara Liesch, Environmental Engineer, Expera

Purpose of Inspection: To evaluate Expera's compliance with its Federal Operating Permit.

Facility Type: Pulp and Paper Mill

Regulations Central to Inspection: National Emission Standard for Hazardous Air Pollutants (NESHAP) Subpart MM – Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills; NESHAP Subpart DDDDD – Industrial, Commercial, and Institutional Boilers and Process Heaters.

Arrival Time: 1:00 PM CST
Departure Time: 4:00 PM CST

Inspection Type:

- ☒ Unannounced Inspection
- ☐ Announced Inspection

OPENING CONFERENCE

- ☒ Credentials Presented
- ☒ CBI warning to facility provided

The following information was obtained verbally from facility personnel unless otherwise noted.

Company Ownership: A private equity firm obtained several pulp and paper mills in 2013, including the Thilmany Mill in Kaukauna, Wisconsin, and merged them under the new name of Expera Specialty Solutions.

Process Description:

Pulp Mill

Expera produces brown pulp for food packaging, labeling, and other specialty paper markets. Hardwood (oak, maple) and softwood (pine) arrive at the wood yard and are sent to the wood room for processing. Logs enter a mechanical debarking drum, a chipper, and screens before being sent for further processing. Chips purchased from outside sources enter the wood room where particulate emissions are controlled by a cyclone. Depending on the desired product, various proportions of hardwood and softwood chips transferred to four digesters. Each digester acts as a pressure cooker. Steam and white liquor consisting of sodium hydroxide are introduced to the digesters to separate lignin from the wood fibers. Cooking is done for 3.5 – 4 hours. The resulting pulp is sent to a blow tank where vapors are vented to a condenser through a high volume, low concentration system. Non-condensable gases from the condenser are routed through a low volume, high concentration system to be combusted at the Facility's lime kiln or No. 11 Boiler. Pulp is sent through mechanical knotters and washers, where black liquor is diluted and directed to a series of evaporators, a concentrator, recovery boiler, and lime kiln to be recycled back as white liquor. Expera operates one open washer and one closed washer. Pulp leaving the washers is screened, cleaned, and thickened before being sent to a brown high density storage tower. Pulp may be directly transferred from the high density tower to the paper mill to produce brown wet lap and paper.

Paper Mill

The paper mill operates five paper machines and pulls from the high density tower. Paper leaving the paper machines may be coated depending on the product desired. An off-machine pulper is available for each paper machine. At the pulpers, unusable coated paper can be broken up with water, steam, and additional chemicals.

Wastewater Treatment

A wastewater treatment plant at the Facility accepts wastewater from the pulp mill, paper mill, and energy and steam generating operations. Water from the pulp mill is transferred to an aerated lagoon, and then joins the paper mill stream at the primary clarifier and an oxygen sludge reactor. After secondary clarification, treated water is discharged.

Staff Interview: Expera has 600 on-site employees and operates 24 hours a day, seven days a week. The Facility shuts down once every four years for maintenance.

TOUR INFORMATION

EPA toured the facility: Yes

Data Collected and Observations:

EPA toured the pulp and paper mills with a FLIR Camera.

Photos and/or Videos: were taken during the inspection.

See Appendix A: Digital Image Log.

Field Measurements: were not taken during this inspection.

RECORDS REVIEW

1. Process Flow Diagram

SIGNATURES

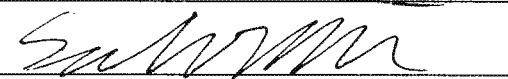
Report Author:



Date:

5/22/18

Section Chief:



Date:

5/24/18

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APPENDICES AND ATTACHMENTS

1. Appendix A: Digital Image Log

Facility Name: Expera Specialty Solutions (Expera)

Facility Location: 600 Thilmany Road, Kaukauna, Wisconsin 54130

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APPENDIX A: DIGITAL IMAGE LOG

1. Inspector Name: Victoria Nelson	2. Date(s) of Inspection: March 19, 2018
3. Company/Facility Name: Expera Specialty Solutions (Expera)	4. Street Address, City, State: 600 Thilmany Road, Kaukauna, Wisconsin 54130
5. Number of Images: 2	6. Archival Record Location: C:\Users\Vnelson\OneDrive - Environmental Protection Agency (EPA)\Targeting and Inspections\Expera WI\Thilmany